APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,223	04/20/2001	Rich Chen	MR1957-533	9197

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EXAMINER
SHAPIRO, LEONID

ART UNIT	PAPER NUMBER
2673	

DATE MAILED: 01/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

	Application No.	Applicant(s)
Office Action Summary	09/838,223	CHEN, RICH
	Examiner	**Art Unit**	
	Leonid Shapiro	2673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

> A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
> - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
> - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
> - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
> - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
> - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-25* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-25* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>20 April 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

　　If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All   b)☐ Some * c)☐ None of:

　　　1. ☐ Certified copies of the priority documents have been received.

　　　2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

　　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

　　a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

Specification

1.   The disclosure is objected to because of the following informalities: On page 7, instead of

Fig. 1-2, Fig. 3 should be mentioned.   On page 5, Fig. number should be changed from 3 to 5.

On page 5, Line 20 step 331 mentioned. There is no step 331 in Fig. 5. On page 6 Fig. numbers

need to be corrected.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

2.   Claims 1, 5-13, 23-25 rejected under 35 U.S.C. 103(a) as being unpatentable over Paolini

n(US Patent 6,429,793 B1) in view of Kraft (US Patent No. 6,309,305 B1) and further in view of

Chiang (US Patent No.6,154,758).

As to claim 1, Paolini teaches an auxiliary device for editing document, with a computer

peripheral having an internal circuit with single-chip microprocessor (See Fig. 1, item 102, in

description See Col. 4, Lines 31-39); and a key set arranged on computer peripheral and

connected to an I/O bus of microprocessor; the microprocessor generating a pseudo composite-

key code corresponding to a key in the modular key set pressed by a user (See Fig. 1-2, items

102, steps 20-28, in description See Col.1, Lines 35-37, Col. 2, Lines 38-41 and Col. 4, Lines 53-68).

Paolini does not show a modular key set with document editing function, whereby the user can directly edit document by using the modular key set provided on computer peripheral.

Kraft teaches a modular key set with document editing function, whereby the user can directly edit document by using the modular key set provided on computer peripheral (See Fig. 2-3, 8, items 2-3, in description See Col. 4, Lines 56-68 and Col. 5, Lines 1-12). It would have been obvious to one of ordinary skill in the art at the time of invention to implement modular key set in the Paolini apparatus in order to provide a method of transferring data from one application to another (See Col. 1, Lines 46-49 in Kraft reference).

Paolini and Kraft do not show single chip processor.

Chiang teaches a single chip microprocessor in converting display text from one format to another (See Fig. 1, item 12, in description See Col. 4, Lines 42-50). It would have been obvious to one of ordinary skill in the art at the time of invention to use single chip microprocessor as shown by Chiang in the Paolini and Kraft apparatus in order to reduce cost and complexity of above mentioned apparatus.

As to claim 5, Paolini teaches sending specific code to a code-conversion software (See Fig. 2, item 240, in description See Col. 4, Lines 52-68).

As to claim 6, Paolini teaches a keyboard as computer peripheral (See Fig. 1, item140, in description See Col.4, Lines11-39).

As to claims 7, 10-13, 23-25, Kraft teaches copy and paste keys out of modular set (See 2-3, 8, items 2-3, in description See Col. 4, Lines 56-68 and Col. 5, Lines 1-12).

Kraft does not teach cut and mark keys. It would have been obvious to one of ordinary skill in the art at the time of invention to add to modular key set cut and mark keys in the Paolini apparatus in order to provide a method of transferring data from one application to another (See Col. 1, Lines 46-49 in Kraft reference).

As to claim 8, Paolini and Kraft do not teach wherein the key code of the modular key set has separation larger than 1.5-2 ms. However, it is generally considered to be within the ordinary skill in the art to adjust, vary, select or optimize the numerical parameters or values of any system absent of showing criticality of in a particular recited value. Thus, it would have been obvious to one of ordinary skill in the art at the time of invention to interchange values of separation.

As to claim 9, Paolini teaches that any key could be reprogram to any function on output character (See Fig. 2, item 260, in description See Col. 5, Lines 16-30). It would have been obvious to one of ordinary skill in the art at the time of invention to place the modular key set beside the Shift key on keyboard in the Paolini apparatus in order to provide extra functions on a keyboard (See Col. 2, Lines 38-41 in Paolini reference).

3.   Claim 2 rejected under 35 U.S.C. 103(a) as being unpatentable over Paolini, Kraft and Chiang in view of Krause et al. (US Patent No. 6,154,757).

Paolini, Kraft and Chiang do not show short-cut key is further provided on the computer peripheral to invoke an associated program.

Krause et al. teaches shortcut keys which automatically advance the text displays (See Fig. 4B, item 447, in description See Col. 10, Lines 33-39). It would have been obvious to one

of ordinary skill in the art at the time of invention to implement short-cut key as shown by

Krause et al. in the Paolini, Kraft and Chiang apparatus in order to enhanced a user ability for

moving around with a text (See Col. 1, Lines 24-29 in Krause et al. reference).

4.   Claims 3-4, 14-22 rejected under 35 U.S.C. 103(a) as being unpatentable over Paolini,

Kraft and Chiang in view of Hsu et al. (US Patent No. 6,320,519 B1).

Paolini, Kraft and Chiang do not show switch key with LED and a plurality of

composite keys and the functions of the composite keys controlled by a switch key.

Krause et al. teaches switch key (symbol key) with LED (for ScrollLock key) and a

plurality of composite keys and the functions of the composite keys controlled by a switch key

(See Fig. 1-2, item 15-26, in description See Col. 3, Line 37 and Col. 4, Lines 58-67, Col. 5,

Lines 58-68). It would have been obvious to one of ordinary skill in the art at the time of

invention to implement switch key to modify composite keys for redo, undo, bold, open, new,

save, find, forward and function keys F1-F12 as shown by Hsu et al. in the Paolini, Kraft and

Chiang apparatus in order to switch a plurality of switchable keys between a first key code set

and second key code set with a single modifier key (See Col. 2, Lines 17-20 in Hsu et al.

reference).

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure:

The Ashe (US Patent No. 6,269,389 B1) reference discloses method and system for

controlling the coping and insertion of contents of documents.

The An et al. (US Patent No. 5,936,614) reference discloses user defined keyboard entry

system.

The Nebenzahl (US Patent No. 5,164,723) reference discloses configurable keyboard.

The Peters et al. (US Patent No. 5,157,763) reference discloses visually assisted method

for transfer of data within an application or from a source application to a receiving application.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Leonid Shapiro whose telephone number is 703-305-5661. The

examiner can normally be reached on 8 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Bipin Shalwala can be reached on 703-305-4938. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-872-9314 for regular

communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-305-4750.

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January 10, 2003

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